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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,680	12/28/2000	Tadashi Ohta	XA-7183E	8012

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EXAMINER

HERNANDEZ, NELSON D

ART UNIT	PAPER NUMBER
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2622

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08/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/749,680	OHTA ET AL.	
	Examiner	Art Unit	
	Nelson D. Hernandez	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 June 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 27,28 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 27,28 and 30 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 December 2000 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 07/802,812.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____. _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 13, 2007 has been entered.

Response to Amendment

2. The Examiner acknowledges the amended claims filed on June 13, 2007. **Claims 27 and 28 have been amended. Claims 1-26 and 29 have been canceled.**

Response to Arguments

3. Applicant's arguments with respect to claim 27 have been considered but are moot in view of the new grounds of rejection.

Claim Objections

4. **Claim 27** is objected to because of the following informalities: in page 4, lines 3-4, the phrase "said instruction member" should be corrected to recite " said calculation

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portion" since the calculation portion is the one calculating the number of still images capable of being recorded. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori, US Patent 5,027,214 and Hoda et al., US Patent 6,094,282 in view of Watanabe, US Patent 4,887,161 and further in view of Hisayoshi, JP 2-82773 A.**

Regarding claim 27, Fujimori discloses an electronic camera (Fig. 1) including a camera body (camera body taught in col. 7, lines 15-21) attachable to a detachable memory (See memory 18 in the memory card 17 shown in fig. 1) for storing image data comprising: an image pickup portion (Fig. 1: 4, col. 4, lines 14-27), which picks up an image of an object; an instruction member (Shutter release, see fig. 3; also col. 7, lines 27-51) which is operated by a user for instructing start of image taking; a compression portion (Fig. 1: 14 and 15; figs. 2, 4A and 4B; col. 5, lines 17-35) which compresses still image data at a predetermined compressibility, the still image data being picked up by said image pickup portion after the user operation of said instruction member; a recording portion (See memory 18 in the memory card 17 shown in fig. 1, col. 5, lines 31-35) which records the image data compressed by said compression portion on a

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memory which is attached to the camera body; a remaining capacity detection portion (Fig. 1: 24, col. 6, lines 25-43; col. 6, line 65 – col. 7, line 4) which detects a remaining capacity of said memory; a calculation portion (Fig. 1: 24, col. 6, lines 25-43; col. 6, line 65 – col. 7, line 4) which calculates previous to the user operation of said instruction member (col. 6, lines 25-43; col. 6, line 65 – col. 7, line 4) the number of still images capable of being recorded on said memory based on the remaining capacity detected by said remaining capacity detection portion and a compressed data amount compressed by said compression portion; a display portion (Fig. 1: 26) which is provided on the camera body and a control portion which causes the number of recordable still images calculated by said calculation portion to be displayed on said display portion (Col. 7, line 22 – col. 8, line 57).

Fujimori does not explicitly disclose a first selection portion for selecting an image taking mode or reproduction mode; that said image taking occurs in said image taking mode; that the display portion is adapted to display a moving image of the object picked up by said image pickup portion before applying an operation to said instruction member in the image taking mode and to display a still image by reproducing the image data recorded on the detachable memory in the reproduction mode; and that the control portion causes the number of recordable still images calculated by said calculation portion to be displayed overlapping with the moving image on said display portion when the detachable memory is attached to the camera body in the image taking mode; and that said control portion causes said display portion to display an indication that the memory is not attached, without displaying the moving image, when the detachable

memory is not attached to the camera body, even in the image taking mode that said control portion causes the display portion to display a still image by reading out the image data recorded on the detachable memory in the reproduction mode.

However, Hoda et al. discloses a camera (Fig. 1) capable of recording and reproducing image data including a camera body (See fig. 1) attachable to a detachable memory (Fig. 1: 110) for storing image data (detachable memory 110 being inserted to slot 109 as shown in fig. 1), comprising: a first selection portion for selecting an image taking mode or reproduction mode; that said image taking occurs in said image taking mode (As shown in figs. 1 and 2B, SP button 112 corresponds to a switch to change from photography mode to print mode; SV button corresponds to a switch to activate display operation of the images recorded in the detachable memory; Col. 5, line 41 – col. 6, line 25); an image pickup portion (CCD 401 as shown in fig. 4) which picks up an image of an object; an instruction member (Fig. 1: 103) which is operated by a user for instructing start of the image taking in the image taking mode (Col. 5, lines 41-46); a compression portion (processor 407 as shown in fig. 4; col. 6, line 31 – col. 7, line 9) which compresses still image data at a predetermined compressibility (Col. 7, lines 10-27), the still image data being picked up by said image pickup portion after the user operation of said instruction member (col. 6, line 31 – col. 7, line 27); a display portion (Fig. 2B: 106) which is provided on the camera body (See fig. 2B), said display portion adapted to display a moving image (display working as an electronic viewfinder; col. 3, line 55 – col. 4, line 10; col. 4, line 63 – col. 5, line 2) of the object picked up by said image pickup portion before applying an operation to said instruction member in the

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image taking mode and to display a still image (Col. 4, line 63 – col. 5, line 2; col. 6, lines 6-25) by reproducing the image data recorded on the detachable memory in the reproduction mode (Col. 3, line 55 – col. 4, line 10; col. 4, line 63 – col. 5, line 2; col. 6, lines 6-25; col. 16, line 47 – col. 17, line 28; col. 18+); a control portion causing information related to the selected modes (frame number, print in process or print complete status) and warnings to be displayed overlapping with the image on said display portion when the detachable memory is attached to the camera body (Col. 16, line 47 – col. 20, line 41); said control portion causes said display portion to display an indication that the memory is not attached when the detachable memory is not attached to the camera body, even in the image taking mode (Col. 17, line 37 – col. 19, line 6; col. 19, lines 38-58; col. 20, lines 17-52), and said control portion causes the display portion to display a still image by reading out the image data recorded on the detachable memory in the reproduction mode (Col. 16, line 47 – col. 20, line 41).

Therefore, taking the combined teaching of Fujimori in view of Hoda et al. as a whole, at the time the invention was made, one of ordinary skill in the art would consider the advantages of having a first selection portion for selecting an image taking mode or reproduction mode giving the user the flexibility to decide whether to capture image data in a capture mode or to reproduce image data in a display of a reproduction mode; also to have the advantage of allowing the user to know the portion of the image that is being captured by displaying said portion in a display device in real time so that the user can make any adjustment such as movement to have the subject being captured in the center when capturing the image; to allow the user to later review the

images captured that are stored in memory without having to transfer the image data from the memory of the camera to a computer or a TV system; to have the user aware of certain processes being performed while watching the image data in the display of the camera by displaying information about said processes overlapping the image data displayed, thus making the display portion an integral part; and to have the user aware of whether the camera does not have a memory card attached to store the image data when trying to capture image data or accessing said image data; to modify the electronic camera in Fujimori to have a first selection portion for selecting an image taking mode or reproduction mode; that said image taking occurs in said image taking mode; the display portion adapted to display a moving image of the object picked up by said image pickup portion before applying an operation to said instruction member in the image taking mode and to display a still image by reproducing the image data recorded on the detachable memory in the reproduction mode; to have said control portion causing information related to the selected modes and warnings to be displayed overlapping with the image on said display portion when the detachable memory is attached to the camera body; to have said control portion causing said display portion to display an indication that the memory is not attached when the detachable memory is not attached to the camera body, even in the image taking mode; to have said control portion causing the display portion to display a still image by reading out the image data recorded on the detachable memory in the reproduction mode. The motivation to do so would have been to improve the electronic camera operation by giving the user the flexibility to decide whether to capture image data in a capture mode or to reproduce

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image data in a display of a reproduction mode; to have the advantage of allowing the user to know the portion of the image that is being captured by displaying said portion in a display device in real time so that the user can make any adjustment such as movement to have the subject being captured in the center when capturing the image; to allow the user to later review the images captured that are stored in memory without having to transfer the image data from the memory of the camera to a computer or a TV system; to have the user aware of certain processes being performed while watching the image data in the display of the camera by displaying information about said processes overlapping the image data displayed, thus making the display portion an integral part; and to have the user aware of whether the camera does not have a memory card attached to store the image data when trying to capture image data or accessing said image data.

The combined teaching of Fujimori in view of Hoda et al. fails to teach that the control portion causes the number of recordable still images calculated by said calculation portion to be displayed overlapping with the moving image on said display portion when the detachable memory is attached to the camera body in the image taking mode; and that said display of an indication that the memory is not attached when the detachable memory is not attached to the camera body is displayed without displaying the moving image.

However, Watanabe teaches a digital camera (Fig. 2: 10) comprising a display (Fig. 2: 24), which can be used as a viewfinder for displaying moving images when capturing image data and also displays the remaining number of frames (Fig. 1: D1) in

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the memory (Fig. 1: 20) overlapping the displayed image by teaching that the image displayed does not have to be read only from the memory device but also can be read directly from the camera through buffer memory (Fig. 7: 24A) as a modification to the invention of displaying the picture, so the image data from the subject would be read from the memory buffer to be displayed, wherein the buffer memory 24A and image memory 22 are connected to the CPU 21, so the image from the being capture in a viewfinder mode can be displayed when the memory is connected to the camera (See fig. 2) (Col. 3, lines 20-41; col.4, lines 41-65; col. 5, lines 22-60). Although Watanabe does not explicitly teach displaying the remaining number of frames in the memory overlapping with the moving image when using the display as a view finder, one of ordinary skill in the art would find obvious would realize the advantages of having the display to also display the remaining number of pictures that can be taken to apply the concept of displaying the remaining number of frames in the memory overlapping with the still image in the first embodiment to the second embodiment, where the display is being used as a view finder with the motivation of having the user aware of the remaining capacity of the memory in either mode.

Therefore, taking the combined teaching of Fujimori in view of Hoda et al. and further in view of Watanabe as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fujimori and Hoda et al. by having the control portion causing the number of recordable still images calculated by said calculation portion to be displayed overlapping with the moving image on said display portion when the detachable memory is attached to the camera body in the

image taking mode. The motivation to do so would have been to reduce the size of the electronic camera since there is no need of a second display for displaying the image data separated from additional data related to the camera operation and memory; thus making the display portion integral while having the user informed about the capacity of the memory to store more images.

The combined teaching of Fujimori in view of Hoda et al. and further in view of Watanabe fails to teach that said display of an indication that said memory is not attached when said detachable memory is not attached to said camera body is displayed without displaying a moving image.

However, Hisayoshi teaches an image reproduction processor (Figs. 1: 20 and 3: 20) connectable to a camera (Figs. 1: 1 and 3: 1), wherein when a memory device (video disk) is not loaded on the camera, a CPU (Fig. 1: 40 A) would send a no-disk display signal to its own display (LCD 44 as shown in fig. 2) and also a CPU (Fig. 1: 50A) would control a character generator (Fig. 1: 60) to create a no-disk message to be displayed in a monitor without displaying any other image data (See displayed message in fig. 2: DP2 displayed without any other image data (i.e. still or moving image data)) (See translation, page 11, lines 4-35).

Therefore, taking the combined teaching of Fujimori and Hoda et al. in view of Watanabe and further in view of Hisayoshi as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fujimori, Hoda et al. and Watanabe by using the concept taught by Hisayoshi and having the display of the camera displaying an indication that the memory is not attached, without

displaying the moving image, when the memory is not attached to the camera body.

The motivation to do so would have been to improve the camera device by alerting the user on whether the camera is loaded with the memory so that the user can easily recognize the error and the ability of the camera to record images.

7. Claims 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori, US Patent 5,027,214, Hoda et al., US Patent 6,094,282 and Watanabe, US Patent 4,887,161 in view of Hisayoshi, JP 2-82773 A and further in view of Watanabe, US Patent 5,032,927.

Regarding claim 28, the combined teaching of Fujimori and Hoda et al. in view of Watanabe and further in view of Hisayoshi fails to teach a selection portion by means of which one of three compressed data amounts compressed by said compression portion is selected by a user, and wherein said calculation portion calculates the number of still images capable of being recorded on said memory based on the compressed data amount selected by said selection portion and the remaining capacity detected by said remaining capacity detection portion.

However, Watanabe '927 teaches a digital camera (Figs. 1, 7, 8 and 9) comprising an image pickup portion (Figs. 1: 14, 7: 14, 8: 14 and 9: 14), which picks up an image of an object; a compression portion (Figs. 1: 26, 7: 26 and 9: 26) which compresses still image data picked up by said image pickup portion at a predetermined compressibility; a selection means (Figs. 1: 88 and 7: 88) for selecting one from three compression ratio ($\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{16}$); a recording portion (Figs. 1: 32, 7: 32, 8: 32 and 9: 32)

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which records the image data compressed by said compression portion on a memory which is detachably attached; a remaining capacity detection portion (Figs. 8: 92 and 9: 92) which detects a remaining capacity of said memory attached; a calculation portion (Figs. 8: 92 and 9: 92) calculates the number of still images capable of being recorded on said memory based on the compressed data amount selected by said selection portion and the remaining capacity detected by said remaining capacity detection portion; a display portion (Figs. 8: 92 and 9: 92) which is provided on an outer surface of said electronic camera and a control portion which causes the number of recordable still images calculated by said calculation portion to be displayed on said display portion (Col. 2, lines 51 - col. 3, line 31; col. 6, lines 1-58; col. 9, lines 8-37; col. 10, line 65 – col. 11, line 28; col. 12, lines 25-51).

Therefore, taking the combined teaching of Fujimori, Hoda et al. and Watanabe in view of Hisayoshi and further in view of Watanabe '927 as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electronic camera by having a selection means for selecting one from three compression ratio and having the calculation portion calculating the number of still images capable of being recorded on said memory based on the compressed data amount selected by said selection portion and the remaining capacity detected by said remaining capacity detection portion. The motivation to do so would have been to select a desired compression ratio from a selection different compression ratio so as to save the image with a desired picture quality, also would help to determine the correct

amount of remaining data in the case of different image compression selected for the image data as suggested by Watanabe '927 (Col. 2, lines 35-48; col. 16, lines 3-14).

Regarding claim 30, the combined teaching of Fujimori, Hoda et al. and Watanabe in view of Hisayoshi and further in view of Watanabe '927 as applied to claim 28 teaches that the detachable memory is a memory card (See Fujimori, memory 18 in the memory card 17 shown in fig. 1, Watanabe, fig. 1: 20, 2: 20, 4: 20, and 7: 20; see also Watanabe '927, fig. 1: 32) which is able to record a plurality of compressed image data (by displaying the number of remaining images to be recorded in the remainder display 92, Watanabe '927 teaches that the memory card is able to record a plurality of compressed image data), and the amount of each compressed image data fluctuates (by teaching that three compression ratio ($\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{16}$) can be selected for compressing the images, Watanabe '927 teaches that the amount of each compressed image data fluctuates since there are different compression ratios leading to different amount of data for different images; see col. 2, lines 51 - col. 3, line 31; col. 6, lines 1-58; col. 9, lines 8-37; col. 10, line 65 – col. 11, line 28; col. 12, lines 25-51).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
9. **Satoh, US Patent 4,325,080** teaches the concept of displaying the amount of pictures or track that can be used for video recording disc by an imaging device overlapping real-time moving image being displayed on a display device (See figs. 2 and 3; col. 1, lines 10-19; col. 2, lines 8-46; col. 3, lines 12-63; col. 5, line 52 – col. 6, line 14).

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 9:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nelson D. Hernandez
Examiner
Art Unit 2622

NDHH
August 22, 2007



LIN YE
SUPERVISORY PATENT EXAMINER